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### REMARKS

Applicants respectfully request reconsideration of the application identified above. Claims 1, 3-10, 13-32 are pending; and claims 1, 3-9, 13-19, 23 and 26 are amended. Applicants respectfully traverse the rejections as conceivably applied to the pending claims.

Applicants wish to express appreciation to Examiners Culbert and Olsen for the courtesies extended to Applicants' attorney in the personal interview on January 21, 2004, during which all pending claims were discussed in view of U.S. Patent 4,624,752 to Arrowsmith. Although no agreement was reached, the claims are amended to particularly point out and distinctly claim the subject matter that the Applicants regard as the invention. It is respectfully submitted that Examiner Culbert will find the amended claims allowable after further consideration.

#### I. Drawing Corrections/ Specification Amendments

The drawings were objected to under 37 C.F.R. §1.83(a). The examiner required that the process of anodizing an unanodized sheet or web be shown. Figs. 3-5 have been amended to show this feature. No new matter has been added to the drawings. Acceptance of the drawing corrections respectfully requested. The specification has also been amended to properly reference the features of the amended drawings.

#### II. Rejections Under 35 U.S.C. §112, First and Second Paragraphs

As originally presented, claims 1-22 were rejected under 35 U.S.C. §112 "as failing to comply with the *enablement* requirement." (Emphasis supplied.) However, the Office Action states that the rejection of these claims is based on an inadequate *written description*,

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specifically, that the “Applicant has described in the specification a process in which a sheet of aluminum that has been anodized on both sides is etched. However, applicant has not described any process that treats a sheet or web of aluminum that has been anodized on one side.” (Emphasis in the Office Action.) Accordingly, the basis for the §112, First Paragraph rejection is unclear because the Action intertwines the enablement and written description requirements, which conflicts with well-settled law that the written description requirement is *separate and distinct* from the enablement requirement. M.P.E.P. §2161.

As best understood, the §112, First Paragraph rejection implies that something not previously described is now being claimed. Therefore, it appears that the rejection may be based on new matter, which requires the examiner to reject the claims under 35 U.S.C. §112, First Paragraph -- written description requirement. M.P.E.P. §2163.06. Assuming this is the basis for the rejection, the Applicants respectfully disagree. The description and support for a process that anodizes only one side -- rather than both sides -- is found in Figs. 1 and 2, Pg. 4, Lns. 9-12 and Pg. 5, Ln. 9-Pg. 6, Ln. 5 of the original disclosure. As shown and described there, aluminum 100 includes an anodic layer 110 that has been etched to form protrusions 120, 121; however, *only one side* of the aluminum 100 is anodized, i.e., the bottom side of the aluminum is not anodized and/or etched. Accordingly, it is respectfully submitted that the claimed subject matter is described, and that the §112, First Paragraph rejection should be withdrawn.

Further, as originally presented, claims 1-12 were rejected under 35 U.S.C. §112, Second Paragraph. Claim 1 has been amended to clarify the subject matter, and it is submitted that the §112, Second Paragraph rejection is overcome.

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### III. Rejection Based on U.S. Patent 4,624,752 to Arrowsmith

As originally presented, claims 1-2, 6-8, 13-15, 20-21, 23-28 and 32 were rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent 4,624,752 to Arrowsmith.

Arrowsmith is directed to a process in which an aluminum part is first anodized in sulfuric or chromic acid. Without any further modification, the anodized part is then immersed and subsequently etched in phosphoric, chromic, or a mixture of sulfuric and chromic, acids. Arrowsmith emphasizes the controlled immersion of the anodized aluminum part in phosphoric acid to a) modify the outer surface of the anodized aluminum part so that, that surface bonds well to adhesives, *but* b) ensure that the inner portions of the aluminum part remain dense, corrosion resistant, and hydration resistant. Col. 3, Lns. 36-51. To reinforce the importance of b) above, Arrowsmith highlights that: “It is important that the alumina is not hydrated by water to form a weak layer of hydrated alumina which markedly reduces the strength of the joint and leads to premature failure.” Col. 1, Lns. 61-63. Thus, in Arrowsmith, all outer surfaces of the anodized aluminum part are necessarily etched with the phosphoric acid--otherwise, if a surface was un-etched, that un-etched surface could become hydrated and reduce the strength of a bond between the part and some other component.

With regard to amended independent claims 1, 13 and 23, Arrowsmith fails to disclose, teach or suggest: a) anodizing a surface of a continuous un-anodized aluminum web to create an anodic layer, sealing<sup>1</sup> the anodic layer, or selectively etching with sodium hydroxide to dissolve part of the anodic layer, thereby roughening the remaining part, but not etching a second

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<sup>1</sup> Support for “sealing” the anodic layer, which seals pores of the anodic layer, is found at Pg. 6, Lns. 18-21.

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surface of the web (amended claim 1); b) anodizing to produce at least one anodic layer, sealing the anodic layer, applying an etching composition comprising sodium hydroxide to remove a portion of the anodic layer, or preventing the etching composition from etching at least one other surface (amended claim 13); or c) anodizing an aluminum sheet or web to produce an anodic layer on first and second surfaces, sealing the anodic layer, or administering a caustic solution comprising sodium hydroxide to the first anodized surface, but not the second anodized surface, to dissolve the anodic layer and create protrusions (amended claim 23).

In contrast, Arrowsmith specifically highlights the advantage of using an acid -- i.e., phosphoric acid -- to etch anodized aluminum. Arrowsmith does not remotely suggest using sodium hydroxide -- which is at the other end of the pH spectrum from Arrowsmith's phosphoric acid etching invention. Further, Arrowsmith in no way suggests sealing the anodic layer. Indeed, contrary to Arrowsmith, such sealing would significantly inhibit (if not completely prevent) the etching by the phosphoric acid, much more so than the etching by the sodium hydroxide of the present invention. Additionally, the proposed modification of Arrowsmith to etch only one side of an aluminum sheet or web, or prevent the etching composition from contacting and etching another anodized surface is completely contrary to the intended purpose of Arrowsmith, i.e., to phosphoric acid etch all surfaces so that the inner portion of the aluminum part is protected from hydration by water. Col. 1, Lns. 61-64; Col. 3, Lns. 45-48. This rendering of Arrowsmith unsatisfactory for its intended purpose confirms the lack of requisite motivation for the proposed modification. M.P.E.P. §2143.01.